

A NEW SPECIES OF THE GENUS *XIAITETTIX* ZHENG ET LIANG FROM SICHUAN, CHINA (ORTHOPTERA, TETRIGOIDEA, TETRIGIDEA)

DENG Wei-An¹, ZHENG Zhe-Min², YANG Rui-Guang³

1. Department of Chemistry and Life Science, Hechi University, Yizhou 546300, China; E-mail: dengweian5899@163.com

2. Institute of Zoology, Shaanxi Normal University, Xi'an 710062, China

3. College of Life Science, Guangxi Normal University, Guilin 541004, China

Abstract A new species of the genus *Xiaitettix* Zheng et Liang, *X. emeishanensis* sp. nov. is described from Emeishan Area of Sichuan, China. *X. emeishanensis* sp. nov. can be easily distinguished from other known species of the genus by the lateral margins of vertex upwards above eyes; apex of hind process of pronotum obtuse; hind femur with 3 lamellate tubercles on median keel of lower side; body dark green; hind tibia black, with light ring in the base and middle. The type specimens are deposited in the Institute of Zoology, Shaanxi Normal University, Xi'an, China.

Key words Orthoptera, Tetrigoidea, Tetrigidae, *Xiaitettix*, new species, China.

The genus *Xiaitettix* was established by Zheng and Liang in 1993 (the type species: *Xiaitettix guangxiensis* Zheng et Liang, 1993, Guangxi, China). The second species was described: *Xiaitettix yunnanensis* Zheng et Mao, 2010, Yunnan, China. While identifying the specimens of Tetrigoidea collected from Emeishan, Sichuan in 2011, a new species of the genus *Xiaitettix* Zheng et Liang is found and is described below. The type specimens are deposited in the Institute of Zoology, Shaanxi Normal University, Xi'an, China.

1 *Xiaitettix emeishanensis* sp. nov. (Figs 1–4)

Description. Female. Size small, stout. Width of vertex 2 times width of an eye, anterior margin of vertex straight, without protruding beyond eyes, lateral margins of vertex upwards above eyes, median carina conspicuous. In profile, vertex and frontal ridge forming round shape, frontal ridge not visible before eyes, slightly protruding archly between antennae, width of longitudinal furrow 1.5 times width of first segment of antennae. Antenna filiform, 14-segmented, length of a segment in middle about 4 times longer than its width, inserted below lower margin of eyes. Eyes globose. Lateral ocelli placed on between one third of anterior margins of eyes.

Pronotum in dorsal view tectiform, with sparsely coarse tubercles, anterior margin obtuse angular, lateral keels of prozona parallel. Median carina of pronotum lamellate in profile, arch-like. posterior process of pronotum short and wide, just reaching middle of hind femora, apex of hind process of pronotum obtuse angular, humeral angles of pronotum inconspicuous. Posterior angles of lateral lobes slightly produced outwards, apex of posterior angles slightly

truncate, posterior margins of lateral lobes of pronotum with one concave. Lower margin of hind process curved, lateral keels of metazona curved too, interspace area broad. Tegmina and hind wings absent. Lower margins of fore and middle femora with two large teeth and undulated separately. Hind femur 3.5 times longer than wide, with 3 lamellate tubercles on median keel of lower side, midkeel of upper side with slender teeth, antegenicular and genicular denticles long-triangular, midkeel of lower side with 6–7 teeth and undulated. Outer side of hind tibia with 6–7 spines, inner side with 7–8 spines. Length of first segment of posterior tarsal longer than the third, the third pulvillus longer than the first and second, apices of three pulvilli obtuse. Ovipositor narrow and long, upper and lower valvulae with slender saw-like teeth. Length of subgenital plate equal to its width, middle of posterior margin of subgenital plate with a triangular convex.

Body dark green, with two pairs of dark spots behind shoulders. Outside of hind femur with three dark spots, lower side black. Hind tibia black, with light ring in the base and middle, first and second segments of hind tarsal black.

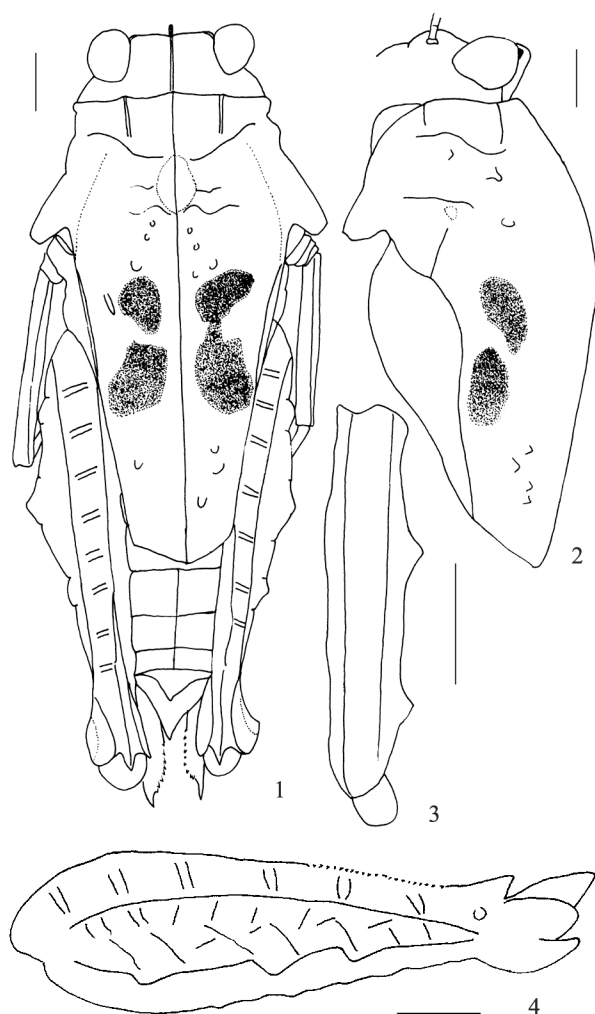
Male. Unknown.

♀. Length of body 12.0–12.5 mm; length of pronotum 7.5–8.0 mm; length of hind femur 7.5–8.0 mm.

Holotype ♀, China, Sichuan, Emeishan, Leiyinsi (29.5°N, 103.2°E; alt. 800 m), 4 Aug. 2011, collected by YANG Rui-Guang. Paratype 1 ♀, same data as holotype. Material is deposited in the Institute of Zoology, Shaanxi Normal University.

The study was supported by the National Natural Science Foundation of China (31160433) and Guangxi Natural Science Foundation (0991266).

Received 30 Jan. 2012, accepted 19 Mar. 2012.



Figs 1–4. *Xiaitettix emeishanensis* sp. nov., ♀. 1. Body, dorsal view. 2. Head and pronotum, lateral view. 3. Middle femur, lateral view. 4. Hind femur, lateral view. Scale bars = 1 mm.

Etymology. The new species was named after the type locality.

Remarks. *Xiaitettix emeishanensis* sp. nov. have some characters of *Metrodoridae*: posterior angles of lateral lobes slightly produced outwards, apex of posterior angles slightly truncate. But here we place it

under *Xiaitettix* Zheng *et* Liang (Tetrigidae) based on width of longitudinal furrow 1.5 times width of first segment of antennae; median carina of pronotum lamellate in profile, arch-like; posterior margins of lateral lobes of pronotum with one concave; tegmina and hind wings absent.

Xiaitettix emeishanensis sp. nov. can be easily distinguished from the known species of the genus by the lateral margins of vertex upwards above eyes; apex of hind process of pronotum obtuse; hind femur with 3 lamellate tubercles on median keel of lower side; body dark green; hind tibia black, with light ring in the base and middle.

Distribution. China (Sichuan).

Key to the species of *Xiaitettix* Zheng *et* Liang, 1993.

1. Lateral margins of vertex upwards above eyes; apex of hind process of pronotum obtuse; hind femur with 3 lamellate tubercles on median keel of lower side *X. emeishanensis* sp. nov.
Lateral margins of vertex not upwards above eyes; apex of hind process of pronotum concave; hind femur with 2 lamellate tubercles on median keel of lower side 2
2. Width of longitudinal furrow 1.5 times width of first segment of antennae; anterior margin of pronotum straight; disc of pronotum brown, with two pair of dark spots behind shoulders; hind tibia dark black, with light ring in the base and middle
..... *X. guangxiensis* Zheng *et* Liang, 1993
Width of longitudinal furrow equal to width of first segment of antennae; anterior margin of pronotum slightly arc; disc of pronotum brown; hind tibia brown ... *X. yunnanensis* Zheng *et* Mao, 2010

REFERENCES

- Deng, W-A, Zheng, Z-M and Wei, S-Z 2007. Fauna of the Tetrigoidea from Yunnan and Guangxi. Guangxi Science & Technology Press, Nanning. 458 pp.
- Jiang, G-F and Zheng, Z-M 1998. Grasshoppers and Locusts from Guangxi. Guangxi Normal University Press, Guilin. 350–351.
- Liang, G-Q and Zheng, Z-M 1998. Fauna Sinica, Insecta, Vol. 12, Orthoptera, Tetrigoidea. Science Press, Beijing. 278pp.
- Zheng, Z-M 2005. Fauna of Tetrigoidea from Western China. Science Press, Beijing. 501pp.
- Zheng, Z-M and Liang, G-Q 1993. A new genus and three new species of Tetriginae from China (Orthoptera: Tetrigidae). *Oriental Insects*, 27: 217–223.
- Zheng, Z-M, Mao, B-Y and Xu, J-S 2010. New species of Tetrigidae from Southwest Yunnan (Orthoptera). *Acta Zootaxonomica Sinica*, 35 (4): 883–891. [动物分类学报]

中国四川夏蚱属一新种记述 (直翅目, 蚱总科, 蚱科)

邓维安¹ 郑哲民² 杨瑞刚³

1. 河池学院化学与生命科学系 宜州 546300, E-mail: dengweian5899@163.com

2. 陕西师范大学动物研究所 西安 710062

3. 广西师范大学生命科学学院 桂林 541004

摘 要 记述采自四川峨眉山夏蚱属 *Xiaitettix* 1 新种, 峨眉山夏蚱 *Xiaitettix emeishanensis* sp. nov.。模式标本保存在陕西师范大学动物所标本室。

峨眉山夏蚱, 新种 *Xiaitettix emeishanensis* sp. nov. (图 1 ~ 4)

本种因其头顶侧缘明显反折, 略高于复眼; 前胸背板后

突末端钝角形; 后足股节外侧下降线具 3 个片状突起; 体暗绿色; 后足胫节黑色, 端部和基部具淡色环区别属内其它种。

正模 ♀, 四川峨眉山 (雷音寺), 海拔 800 m, 2011-08-04, 杨瑞刚采。副模 1 ♀, 同正模。

词源: 新种种名源自模式产地峨眉山。

关键词 直翅目, 蚱总科, 蚱科, 夏蚱属, 新种, 中国.

中图分类号 Q969.26